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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/923,323

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Jung-Wan Ko

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11/19/2003

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EXAMINER

CHIEU, PO LIN

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 11/19/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,323

Applicant(s)

KO ET AL.

Examiner

Polin Chieu

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-23 and 25-29 is/are rejected.
- 7) ☒ Claim(s) 10 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Terminal Disclaimer

2. The terminal disclaimer filed on 9/4/03 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent Application Nos. 09/263,816; 09/583,877; 09/923,322; 09/924,094; 09/923,361; 09/583,876; 09/927,500; 09/927,495; 09/927,494; 09/927,496; 09/927,491; 09/923,401; 09/923,399; 09/923,321; and 09/923,400 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-6, 8, 11, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kajiyama et al (6,283,764).

Regarding claim 1, Kajiyama et al discloses a storage medium which includes audio data recorded in an audio area with catalog playback information (figs. 4 and 5) and catalog information related to the audio data are recorded in another area other than the audio area (fig. 4), wherein the catalog information comprises common catalog data commonly applied for more than one of the audio data recorded on the storage medium, and title catalog information corresponding to each of the audio data (fig. 5); a decoding unit to decode the audio data, the common catalog data and the title catalog information (110 and 116, fig. 2); and a controller (111) to control the decoding unit so as to simultaneously decode the audio data to be played back an one of the common catalog data and the title catalog information corresponding to the audio data to be played back according to the catalog playback information (fig. 14).

Regarding claim 3, Kajiyama et al discloses that the controller distinguishes whether the catalog playback information exist in the storage medium by defining file names of the catalog playback information (fig. 5) or by defining a region of the storage medium predetermined by a physical or logical address designated as a space for storing catalog playback information (fig. 4).

Regarding claim 4, Kajiyama et al discloses a storage medium with audio data and catalog information (discussed in the art rejection of claim 1); a video decoder (110, fig. 2) which decodes one of the common catalog information and the title catalog information and additional information to generate a restored image (fig. 14); an audio decoder which decodes the audio data to be restored, to generated restored audio signals (fig. 14); and a controller which controls playback of one of the common catalog

data and the title catalog information according to the catalog playback information (111).

Regarding claim 5, Kajiya et al discloses that the controller reads the common catalog data and the title catalog information in a predetermined sequence (reproduction times, fig. 5).

Regarding claim 6, Kajiya et al discloses that the common catalog data and the title catalog information are defined to be within the size of a phrase (fig. 5).

Regarding claim 8, Kajiya et al discloses that the restored image is still picture for background display, and the additional information is a sub-picture for transferring characters (fig.14).

Regarding claim 11, Kajiya et al discloses a storage medium (discussed in the art rejection of claim 1); an optical pickup (108, fig. 2) which reads the encoded audio data, the common catalog information, and the title catalog information (fig. 14); and a decoding unit (110 and 116) which decodes the encoded audio data, and one of the encoded common catalog data and the encoded title catalog information according to the catalog playback information (figs. 5 and 14).

The limitations of claim 29 were discussed in the art rejection of claim 29. Please refer to the art rejection of claim 29.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 7, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajiyama et al in view of Moriyama et al (5,889,746).

Regarding claims 2 and 12, Kajiyama et al does not disclose that the controller stores the common catalog data and the title catalog information of the audio data which is to be played back prior to playing back the audio data.

Moriyama et al teaches that the controller stores the common catalog data and the title catalog information (col. 14, lines 58-67) of the audio data which is to be played back prior to playing back the audio data (col. 22, lines 42-57).

It would have been highly desirable to store the common catalog data and the title catalog information prior to playing back the audio data so that the catalog data is stored prior to playback thereby simplifying the reading process (otherwise the device would have simultaneously read the catalog data and audio data during playback).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to store the catalog information prior to playback in the device of Kajiyama et al.

Regarding claim 7, Kajiyama et al does not disclose a storing unit that stores the common catalog data and title catalog information.

As discussed previous, Moriyama et al teaches a storing unit, and it would have been obvious to have a data size of the sum of the common catalog data and the title catalog information equal to or smaller than the capacity of the storing unit.

It would have been highly desirable to have the data size equal to or smaller than the capacity of the storing unit so that all the data could be stored in the storing unit.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have the size equal to or smaller than the capacity of the storing unit in the device of Kajiyama et al.

Regarding claim 13, Kajiyama et al discloses that the control controls playback of one of the encoded common catalog data and a title of the encoded title catalog information corresponding to a selection of a user and the read encoded catalog playback information (figs. 9A-B and 14).

7. Claims 9 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajiyama et al in view of Heo (6,222,983).

Regarding claims 9 and 14-15, Kajiyama et al discloses a storage medium, an optical pickup, and a processor (or decoder), as discussed in the art rejection of claim 11. However, Kajiyama et al does not disclose that video decoder decodes the common catalog data and the title catalog information according to a standard digital versatile disk-video (DVD-video) specification; and audio stored in a DVD-audio format.

Heo teaches a DVD storing data according to a DVD video specification (fig. 2) and a DVD audio specification (fig. 10).

It would have been highly desirable to use a DVD video specification and a DVD audio specification since it is a common format and DVDs provide a larger storage capacity than CD-ROMs.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use a DVD specification in the device of Kajiyama et al.

8. Claims 16-18, 20, 23, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajiyama et al in view of Mimura et al (5,963,704).

Regarding claim 16, Kajiyama et al discloses audio data and catalog playback information in an audio area and catalog information related to the audio data to be in another area other than the audio area (fig. 4), wherein the catalog information comprises common catalog data for information commonly applied for all of the audio data recorded on the storage medium, and title catalog data having information corresponding to distinct items of the audio data (fig. 5), and wherein the catalog playback information includes information on which one of the common catalog data and the title catalog data is to be reproduced when the corresponding item of audio data are reproduced (col. 6, line 55 – col. 7, line 26); and an optical pickup (fig. 2) . However, Kajiyama et al does not disclose an encoding unit and that the optical pickup records the format described by Kajiyama et al.

Mimura et al teaches an encoding unit (fig. 86); and an optical pickup for recording (fig. 89).

It would have been highly desirable to have an encoding unit and an optical pickup so that the device can record in addition to reproducing; and the Mimura et al records to a DVD, which has a larger storage capacity than a CD-ROM.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have an encoding unit and an optical pickup in the device of Kajiyama et al.

Regarding claim 17, Kajiyama et al discloses catalog playback information (fig. 5); and defining file names of the common catalog data and the title catalog data for storage on the storage medium (col. 6, line 55 – col. 7, line 26) or defining a region of the storage medium predetermined by a physical or logical address designated as a space for storing the catalog playback information (fig. 4). Clearly the recording optical pickup would record data according to the format described by Kajiyama et al.

Regarding claim 18, Kajiyama et al discloses video data representing an image which is a still picture relating to the audio data, and additional information that represents a sub-picture for transferring characters (fig. 14). Therefore, it would have been obvious to have an optical pickup recording the encoded data in the format described by Kajiyama et al. It would have been highly desirable to record in the format described by Kajiyama et al so that the a recording medium capable of performing the features described by Kajiyama et al can be recorded. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have and encoding unit and optical pickup recording in the format outlined by Kajiyama et al in the device of Kajiyama et al.

Regarding claim 20, Kajiyama et al discloses common catalog data and title catalog data in an image information region (103b, figs. 4 and 5), and audio data in the audio region of the storage medium (103a).

Regarding claim 23, Kajiyama et al discloses a file identifier (col. 6, line 55 – col. 7, line 26), and an auto presentation information table in which is used to reproduce common catalog data and title catalog data corresponding to a predetermined time according to real-time playback information of the audio data obtained by real-time playback of the audio data (fig. 5). Although Kajiyama et al does not explicitly state that the location information is stored in the auto presentation information table (fig. 5), the reproduction time and the words are stored separately. However they are intended to be reproduced together and Kajiyama et al states, “their correspondences are defined” (col. 7, lines 16-22). Suggesting that a means for determining the location of the catalog information is present.

Regarding claim 26, Kajiyama et al discloses that the title catalog information is divided into distinct title catalog information corresponding to respective ones of distinct items of audio data (fig. 5). However, Kajiyama et al does not disclose recording the catalog information into respective program chains of an image title set on the storage medium.

Mimura et al teach recording into respective program chains of an image title set on the storage medium (figs. 6-9), wherein the data consist of picture and sub-picture data like the catalog information.

It would have been highly desirable to record catalog information into program chains and image title sets so that the data conforms to the DVD standard, thereby allowing the data to be reproduced by DVD players. Further, DVDs have a larger storage capacity than CD-ROMs.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to record into program chains and image title sets in the device of Kajiyama et al.

Regarding claim 27, Kajiyama et al discloses a decoding unit (110 and 116, fig. 2) that decodes the encoded audio data and the encoded common catalog data and title catalog data read from the storage medium (fig. 14); wherein the optical pickup reads the encoded audio data, common catalog data, and title catalog data.

9. Claims 19, 21-22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajiyama et al in view of Mimura et al in view of Heo.

The limitations of claim 19 were discussed in the art rejection of claim 9. Please refer to the art rejection of claim 9.

Regarding claims 21-22 and 25, Kajiyama et al discloses that the title catalog information is divided in distinct title catalog information corresponding to respective ones of the distinct items of audio data (col. 6, line 55 – col. 7, line 26 and figs. 4-5). However, Kajiyama et al does not disclose recording catalog information into program chains and image title sets; and audio data into audio title sets.

Mimura et al teaches recording into program chains of an image title set (as discussed in the art rejection of claim 26).

Heo teaches audio data in audio title sets (fig. 10).

It would have been highly desirable to record in audio title set and image title sets so that the data could be recorded on a DVD, which has a larger storage capacity than a CD-ROM.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to record into image title set and audio title sets in the device of Kajiyama et al.

10. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajiyama et al in view of Mimura et al and Moriyama et al.

Regarding claim 28, Kajiyama et al discloses controller to control the decoding unit so as to simultaneously decoded the audio data to be played back and a corresponding one of the common catalog data corresponding to the audio data to be played back in accordance with the catalog playback information (figs. 4-5 and 14); and that the controller distinguishes catalog information based on file names or a physical or logical address (as discussed in the art rejection of claim 17). However, Kajiyama et al does not disclose a storage device.

Moriyama et al teaches a storage device (as discussed in the art rejection of claim 7).

It would have been highly desirable to have a storage device so that the read operation is simplified when reading the catalog and audio data simultaneously.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a storage device in the device of Kajiyama et al.

Allowable Subject Matter

11. Claims 10 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: Kajiyama et al discloses that the catalog playback information includes a file identifier (col. 6, line 55 – col. 7, line 32) and an audio presentation information table used to determine the location of the common catalog data and the title catalog information to be played back corresponding to a predetermined time in accordance with real-time playback information of audio obtained from the audio data during real-time playback. However, the prior art does not disclose that if a user does not enter a catalog selection command for a given time during a playback mode of the audio data, the controller reads the audio information table to extract the corresponding one of the common catalog information and title catalog information of the audio data being played back. Further the prior art does not discloses that the file identifier comprises a plurality of program chain numbers corresponding to the program chains of the common catalog information and title catalog information, and catalog pointers pointing to locations on the storage medium of the program chains.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-Th 8:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

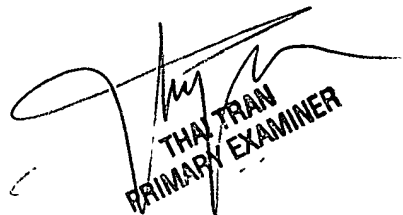
Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

PC
November 13, 2003



THAI TRAN
PRIMARY EXAMINER